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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/576,648	05/22/2000	Kar W. Yung	PD200049	3266

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THE DIRECTV GROUP INC
PATENT DOCKET ADMINISTRATION RE/R11/A109
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EXAMINER	
TORRES, MARCOS L	
ART UNIT	**PAPER NUMBER**
2683	#10

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/576,648	YUNG ET AL.	
	Examiner	Art Unit	
	Marcos L Torres	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 May 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 2-22 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 2-22 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 2, 9 and 15 are objected to because of the following informalities: These claims recite the limitation of: the user, mobile user, first user, etc and a mobile terminal; it is not clear if the mobile user and mobile terminal are the same. And it would be clearer if the claim specify that the user accomplish these tasks through the use of a device (for example: the user device, the mobile user device, apparatus, terminal, etc). Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. The term "type" in claim 2 is a relative term which renders the claim indefinite. The term "type" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 9-11, 13-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews in view of Hamabe.

As to claim 15, Matthews discloses a mobile wireless communication system for mobile users (see fig. 1, item 10), comprising: a plurality of individual transponder nodes (see fig. 2, items 12, 14), each having an established link with a ground hub (see fig. 2, item 30); a plurality of individual resource cells each associated with at least one of said plurality of transponder nodes and one of a plurality of codes (see fig. 2, item 20; par.

0016, 0022); and a plurality of remote users having an established link with said ground hub (see fig. 2, item 24, and each being assigned one or more of said plurality of individual resource cells in code-platform space wherein at least a first user of the plurality of remote user is assigned first resource cell from the plurality of individual resource cell corresponding to more than one transponder (see fig. 2, items 12, 14, 20, 26, 28; par. 0016, 0022). Matthews do not specifically disclose adding signal from more than one transponder node. Hamabe discloses adding signal from more than one transponder node (BTS) (see col. 21, lines 5-30). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these techniques to manage the wireless communication resources for a reliable transmission and reception.

As to claims 16-17 and 19, Matthews discloses the system wherein a plurality of individual transponding nodes is a manned/unmanned aircraft (see par. [0005-0006]; fig. 1-2, items 12,14).

As to claims 10 and 11, Matthews discloses the system wherein a plurality of individual transponding nodes is a manned/unmanned aircraft (see par. [0005-0006]; fig. 1-2, items 12,14).

As to claim 13, Matthews discloses the method wherein at least one of said plurality of transponder nodes is selected from a tower based cellular network (see par. 0017).

As to claim 14, Wright discloses the method wherein at least one of said plurality of transponder nodes is selected from a space-based system (see col. 1, lines 16-22).

Regarding claims 9-11, they are the corresponding method claims of system claims 15-17. Therefore, claims 9-11 they are rejected for the same reason shown above.

9. Claim 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews in view of Hamabe as applied to claims 9-11, 13-17 and 19 above, and further in view of Tuck.

As to claim 18, Matthews do not specifically disclose the system wherein said high altitude platform system is comprised of a plurality of high altitude balloons. Tuck discloses the system wherein said high altitude platform system is comprised of a plurality of high altitude balloons (see col. 9, lines 16-24). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to use this airborne platform for the simple purpose of saving money.

As to claim 20, Matthews do not specifically disclose the system wherein said pluralities of individual transponder nodes are not all of the same type. Tuck disclose the system wherein said plurality of individual transponder nodes are not all of the same type (see col. 2, lines 47-57). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to add this teaching to the modified Matthews system for an enhanced coverage.

10. Claims 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews in view of Hamabe as applied to claims 9-11, 13-17 and 19 above, and further in view of Moerder.

As to claims 21, Matthews do not specifically disclose wherein said processing hub pre processes signals for forward link transmission such that they are radiated with compensating time delays to an intended one of said plurality of mobile users who coherently receives all such signals intended for him; wherein said processing hub post processes received signals to introduce compensating time delays such that all such signals received from a particular remote user may be coherently processed together. Moerder discloses a processing hub pre processes signals for forward link transmission such that they are radiated with compensating time delays to an intended one of said plurality of mobile users who coherently receives all such signals intended for him; wherein said central processing hub post processes received signals to introduce compensating time delays such that all such signals received from a particular remote user may be coherently processed together (see col. 6, lines 20-30). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine this teaching to the modified Matthews system for the simple purpose of synchronization.

11. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews in view of Hamabe as applied to claims 9-11, 13-17 and 19 above, and further in view of Wright (6,507,926).

As to claim 22, Matthews do not specifically disclose the system wherein at least one said plurality of mobile terminals is assigned resource cells in platform-code space for said return link that are different from said resource cells in platform-code space assigned for said forward link. Wright disclose the system wherein at least one said

plurality of mobile terminals is assigned resource cells in platform-code space for said return link that are different from said resource cells in platform-code space assigned for said forward link (see col. 3, lines 4-13). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings for reducing interference.

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews in view of Hamabe as applied to claims 9-11, 13-17 and 19 above, and further in view of Tuck.

As to claim 12, Matthews do not specifically disclose the system wherein said high altitude platform system is comprised of a plurality of high altitude balloons. Tuck discloses the system wherein said high altitude platform system is comprised of a plurality of high altitude balloons (see col. 9, lines 16-24). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to use this airborne platform for the simple purpose of saving money.

Allowable Subject Matter

13. Claims 2-8 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

14. Applicant's arguments, see pages 8-9, filed May 25, 2004, with respect to claims 1-8 have been fully considered and are persuasive. The previous rejection of claims 1-8 has been withdrawn.

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this Office Action should be mailed to:

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(703) 703-872-9306

For formal communication intended for entry, informal communication or draft communication; in the case of informal or draft communication, please label "PROPOSED" or "DRAFT"

Hand delivered responses should be brought to:

Crystal Park II
2121 Crystal Drive
Arlington, VA
Sixth Floor (Receptionist)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcos L Torres whose telephone number is 703-305-1478. The examiner can normally be reached on 8:00am-5:30pm alt. friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William G Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marcos L Torres
Examiner
Art Unit 2683

Mlt

WILLIAM TROST
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